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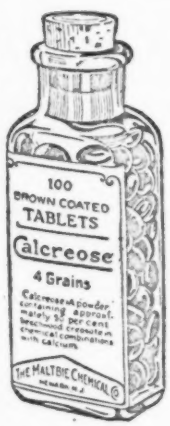

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EDITORIAL

DR. HAYNE HONORED

At the recent commencement exercises of the Medical College of the State of South Carolina, the degree of Doctor of Public Health was conferred on Dr. James A. Hayne, State Health Officer of South Carolina. This honor has been worthily bestowed. By virtue of Dr. Hayne's virile leadership, South Carolina has been placed well in the forefront of states having an efficient and up-to-date health department. During the incumbency of the present state health officer, the appropriations have increased from just a few thousand to approximately a quarter of a million from all sources. We believe honorary degrees should not be granted to anyone who has not measured up to a high ideal of service either to the institution or to humanity or to both. In this case Dr. Hayne is peculiarly deserving. In season and out of season, for many years he has travelled to the city of Charleston and delivered systematic lectures at the Medical College on public health thus aiding the Medical College of the State of South Carolina in its pioneer work along this line. We say pioneer because medical education in the past has been almost wholly presented to the students from the standpoint of curative medicine. Today this viewpoint is being changed, and preventive medicine for the individual practitioner of the future is coming into its own. Dr. Hayne has been signally honored in public health circles throughout the country. He is recognized as an authority and many visitors come to South Carolina for the purpose of observing the working of the many divisions of the state health department so admirably conducted by Dr. Hayne and his associates.

PRESIDENT BUNCH APPOINTS COMMITTEES

Dr. George H. Bunch, after conference with the other officers of the state association, has made the appointments on the standing com-

mittees for the coming year. The secretary has notified each of these appointees, and in most instances received acceptances. We wish to call attention to the personnel of the Committee on Scientific Work which is as follows: Dr. J. H. Gibbes, Columbia, Chairman; Dr. J. H. Cannon, Charleston; Dr. F. B. Johnson, Charleston; and the President and Secretary ex-officio. We feel confident that this committee will provide a program fully in keeping with the advances of modern medicine and surgery. The committee welcomes suggestions from the members of the association.

ORIGINAL ARTICLES

TWO UNUSUAL CASES

By Wm. Buck Sparkman, M. D., Greenville, S. C.

The incidence of hypertrophy of the prostate in men past middle life is familiar to all and every practitioner sees his share of such cases. Usually they present a fairly uniform history and are either benign or malignant. Out of a fairly large experience with such conditions, recently there came into my hands one which deviated rather sharply from the usual and which necessitated a radical departure from my method of treating these cases.

A. D. S., colored male, seventy-six years of age, began having some di__culty in voiding about nine years ago. About five years ago he had his first attack of acute retention and had to be catheterized. Following this, from time to time, he required catheterization during attacks of acute retention, with periods of remission between, during which he managed to void, though with some di__culty. On October 9, 1925, he began to have a hemorrhage from the urethra so he catheterized himself, after which the bleeding was more profuse. The next day he saw Dr. T. M. Davis, of Greenville, who gave him appropriate treatment. On the 11th he saw Dr. Davis again, at which time he was given horse serum to check the hemorrhage. On the 12th the bleeding had stopped but instrumentation induced it again. Cystoscopic examination was impossible and emptying the bladder equally so on account of blood clots. The bladder was filled with a weak solution of permanganate solution and the patient sent to the hospital. He had lost a great deal of blood, estimated by Dr. Davis at about a quart on the 12th.

I saw the patient shortly after his arrival at the hospital. The physical examination was confined to an investigation of the condition of the heart and lungs, with no chance for any laboratory tests such as the kidney function, blood chemistry, etc. The heart was enlarged to the left but there were no murmurs. The arteries were sclerotic. The pulse was fairly good, with an extra systole about every twenty or thirty beats. The lungs were negative. The hypogastrium was enormously distended and the mass had a doughy feel. The patient was most uncomfortable. Without further ado, he was prepared for operation and sent to the operating room for cystotomy.

It was not possible to irrigate the bladder before opening it, so under nitrous oxide-oxygen-ethylene anaesthesia, a suprapubic incision was made. After clearing out a large quantity of clotted blood and with the edges of the wound well retracted, it was seen that there was no single point of active bleeding but that the entire mucous membrane pushed up like a dome into the bladder by an enormous prostate, was weeping blood. The oozing was so free and so extensive that it was obviously impossible to tie off anything, so enucleation of the prostate was decided upon. This was accomplished with some difficulty but the bleeding was stopped and we were able to use sutures in the mucous membrane to good advantage in closing the rent in it about an indwelling catheter. The further treatment consisted of proctoclysis of 5% soda bicarbonate solution by Murphy drip for a few hours each morning and after it was safe, irrigation with boric

acid solution. The patient left the hospital on November 6th, with slight drainage from the suprapubic wound, but voiding freely. The tract healed shortly, there is complete control, and the patient is doing his farm work.

Another case of rather unusual interest was that of P. D., a negro boy of five years. He was admitted to the charity service of the Greenville City Hospital on November 22, 1925, at 12:45 A. M., with the history of having had diarrhea for about three weeks and for the past two or three days of the passage of pure blood from the rectum. He was said to have had a "weak spine" and did not walk until he was three years old, but he had had no previous bowel trouble. A glance was sufficient for the diagnosis. A mass was visible in the abdomen but at no time had there been any vomiting. A finger in the rectum met with obstruction at about one inch from the anus. The condition of the child made it apparent that he was beyond relief but we decided to operate anyway rather than let him die without any effort to help him.

We gave him ether and made a midline incision below the umbilicus. As soon as the skin was incised we detected a terrific odor. When the peritoneum was opened, a large gangrenous mass consisting of parts of the ascending and transverse colon presented in the wound. The intussusseption began at the caecum, the ileum being invaginated together with the caecum and the appendix, the intussusseptum extending clear down into the rectum, the mass which was felt by the examining finger. The interesting feature was another intussusseption in the opposite direction at the splenic flexure, about eight inches of descending colon being invaginated into the transverse. Strange to relate, the condition was reduced without much difficulty. Having accomplished this, perhaps it would have been better to anchor the gangrenous gut outside the abdomen and provide for drainage, but a resection was decided upon. As rapidly as possible, the ascending and transverse colons were removed and anastomosis made between the terminal ileum and the terminal transverse colon. Unfortunately the patient died just as this was concluded.

I am reporting this case because of the double invagination which in my experience is most unusual. The absence of any vomiting is another rather unusual feature.

THE DIET AND NUTRITION OF THE CHILD

By William Weston, M. D., Columbia, S. C.

In preparing this address upon a subject that is so intimately bound up in the welfare and progress of our State, I could not but be reminded of the text of that masterly report of Dr. W. D. Melton, President of the University of South Carolina, to the General Assembly.

In this report he has cleverly analyzed conditions in South Carolina and has suggested what he feels is the appropriate remedy. He has candidly and fearlessly exposed our shortcomings by such an array of facts that cannot but bring conviction to each one of us. It is one that compels thoughtful consideration by every South Carolinian who is worthy of his heritage. It cannot but impress upon each one of us the solemn obligation to subordinate self and become active in the solution of the problems that he has so definitely presented to us for consideration and solution.

His final conclusion, in which I trust we all concur, is education in its broadest and most comprehensive sense.

Some time later I read the annual report of the State Board of Health, with which I trust you are all familiar, and, came to these impressive and astounding figures. Number of school children examined 20,766. Pupils defective 13,307, defects 17,892. There are 245,619 white children in the schools of the state. Should the average quoted apply generally, we must assume that about 150,000 have more or less serious defects. The same report shows that 42,025 children were examined for dental defects. The number found with defective teeth was 37,823. This can only mean that more than 80% had been given diets that were deficient in two or more of the most important of the mineral elements, namely, calcium and phosphorous. We have

*Read in the Symposium on the Nutrition of the Child before the South Carolina Medical Association, Sumter, S. C., April 8, 1926.

learned from experience that where these elements are deficient we may expect manifestations of the nervous and osseous systems. Unless these conditions can be corrected is it not evident that the educators have a difficult task before them? They must not be permitted to continue, and measures should be instituted to correct them. Unless this can be done, can the education of the people upon which the Commonwealth depends in order to insure her peace and safety be accomplished? Might we not with just as reasonable assurance of success undertake the making of brick without straw or cloth without threads? With such conditions do you wonder that we are contending for the lowest place among the states in illiteracy, that we are backward and poor? What false economy it is to undertake to educate children whose physical condition debars them from the privilege of gaining more than the rudiments of education? Need you be surprised that we have not regained the National leadership which we held from the close of the Revolution to 1860? May I ask each member of this audience if they have ever critically observed an average crowd of South Carolinians such as may be seen on the State Fair grounds on Thursday of Fair week, or, those you pass on the streets of your town each day? Or, perhaps we may take a more selected group, let us say the student body of any one of our colleges. What was your impression of their physical condition? Was it not that they were distinctly under-sized and under-nourished? Have you ever taken the haemoglobin count of a large number of Carolinians over a period of two or three years and noted the results? If you have I am sure you were depressed.

By way of comparison contrast the appearance of the crowd at any large gathering in middle Tennessee or the Lexington district of Kentucky and note their size, their carriage and their complexion. You cannot but be impressed with the difference. These differences cannot be accounted for by the influence of heredity, because they belong to the same stock as we do, nor can they be accounted for by climate, since if we are to accept the conclusions of Huntington in his exhaustive study, "Climate and Civilization" they are not more favored in this respect than are the people in this state. What then, is the most probable and rational explanation? Nutritional scientists say it can only be accounted for by the differences in the food supply and diet. They direct our attention to the differences that exist in the number and quality of live stock. The blue grass regions, as is well known, produce in large numbers the finest live stock that we know of, while in this state native live stock are neither numerous nor of fine quality. We will recall that the soil of the blue grass regions is rich in mineral elements, especially lime and phosphorous, while the soil of South Carolina has become impoverished in these important elements.

The Department of Agriculture calls our attention to the amount of certain mineral elements taken from the soil in bringing to maturity the following cereals:

Pounds per acre of plant food removed from the soil by designated yields of oats, corn and wheat.

	Pounds Gross Weight	Pounds Nitrogen (N)	Pounds Phosphoric Acid (P_2O_5)	Pounds Potash (K_2O)	Pounds Lime CaO
Oats, 50 Bushels					
Grain	1600	35	12	10	1.5
Straw	3000	15	6	35	9.5
Total		50	18	45	11
Corn, 65 Bushels					
Grain	2200	40	18	15	1
Stalks	6000	45	14	80	20
Total		85	32	95	21
Wheat, 20 Bushels					
Grain	1200	25	12.5	7	1
Straw	2000	10	7.5	28	7
Total		35	20	35	8

It is well known that we receive much of our mineral supply through plants and these plants absorb their mineral elements from the soil in almost the same proportion as they exist in the soil. Since we receive so many of these important elements through the medium of milk, we will at once see that they all may be ultimately traced to the mineral content of the soil.

In our consideration of diet in its relation to the nutrition of the child, we cannot overlook certain important influences, such as heredity, climate, environment, hygiene, sanitation and training, each in itself universally recognized as important factors in influencing the standard of a people's civilization. I shall therefore ask that in my discussion of this subject you will not overlook the intimate relationship they bear to that determining factor of civilization, diet, to which I shall devote my attention during the brief time allotted me.

Each human being requires for normal nutrition, fats, carbohydrates, proteins, 15 mineral salts and five vitamins. The proteins must contain at least 20 amino acids, which must be derived from such a variety of sources as to insure their rapid transformation into body cells.

Children have a greater food requirement per unit of weight than adults, because heat production is proportional to body surface, rather than to weight. In the child there is greater muscular activity and more intensive metabolism. The growth requirements of the organism must be met and an additional supply of materials furnished for the formation of new tissue. Consequently, the supply of fats and carbohydrates must be liberal.

The fats differ as to food value and adaptability and these depend upon the quality and source from which they are obtained. It is best that they be derived from a variety of sources such as meats, animal products, vegetables and grains.

Among the more important functions of the carbohydrates are to completely oxidize the fats. The presence of carbohydrates prevent the formation of ketone bodies by the more complete oxidation of fats, they also appear to be important factors in the storage of fats in the tissues. It is important that sugar be given at frequent intervals as the glycogen store becomes readily exhausted and their bodies seem unable to bring about a sufficient glucose synthesis to maintain a normal blood sugar.

Protein is essential to life, because it is the only kind of food capable of replacing the continuous nitrogenous waste of the body cells. It is also an important factor in the promotion of growth. The protein requirement for young children is more than twice as much per unit of weight as for adults. Therefore, we may assume that at least ten per cent of the total calories should consist of protein. It is not improbable that in an active child at least a third of the food proteins are converted into body protein.

The value of protein is determined by the number and variety of amino acids it yields on digestion. The more nearly these proportions correspond to the content of amino acids in the tissues of the growing animal, the more effectively can food proteins be transformed into body proteins. There exists great variation in the composition of proteins from different sources. Some contain very few amino acids, while others contain many. Milk and cereals are valuable sources of supply.

In our consideration of these so-called fundamental nutrients we must not overlook the fact that the three may under different circumstances become sources of energy, where one or the other is absent or deficient. Carbohydrates may be converted into fats and stored as such, likewise proteins may be converted into carbohydrates and ultimately into fats, or proteins may be built up from carbohydrates.

As the study of the problems of nutrition has advanced the mineral salts have constantly assumed a more important role. Of the 15 mineral salts, proteins furnish five and of these five three are contained also in the fats and carbohydrates. The remaining ten must be supplied from other sources.

A child of three years of age requires from 2 to 3 times as much of some of the mineral matter as does the average adult. I especially refer to calcium and phosphorous.

McCollum writes that it is not easy to explain why these elements are important, but life would be impossible in the absence of any one of the following minerals: Calcium, phosphorous, potassium, sodium, sulphur, magnesium, chlorine, iron and iodine.

Mineral metabolism occurs in the body and influences function in several ways. It provides the rigidity and permanent form of the skeletal system. It largely determines the nature of the teeth. It offers the essential elements of organic compounds and forms the chief solid constituent of soft tissues. It determines the

elasticity and irritability of muscle and nerve tissue. The salts are essential agents in the physiologic functions of osmotic pressure and solvent action in the body fluids. Mineral metabolism supplies the material for the acidity and alkalinity of digestive juices and other secretions. There is a definite relationship between the retention of salts and the taking up of water in the tissue.

Calcium is the most important and exists in the largest amount in the system of all the mineral salts. The claim is made that calcium is capable of correcting any disturbances of the inorganic equilibrium in the animal body. Despite this fact it is more often deficient in the diet than any of the mineral elements.

Next in importance is phosphorous which enters into the structure of every cell and is involved functionally in cell multiplication. It is an important factor in the activation and control of enzyme action. The phospho-proteins and phosphatids are essential to the growing organisms.

Iron is essential since the blood would have no oxygen carrying capacity without it. The many cases of chlorosis and mild anaemia in our girls is an evidence of its deficiency in their diets.

The increasing number of cases of goiter being observed in this state can only be interpreted as a deficiency of iodine in the dietary.

As a result of recent investigations vitamins have been reclassified as follows: Vitamin A. Ophthalmia, Vitamin B. Beriberi, Vitamin C. Scurvy, Vitamin E. Reproduction.

Vitamin A. Ophthalmia, was first discovered in butter fats, then in egg yolk and cod liver oil. Its best sources among foods are whole milk, butter, egg yolk, spinach, water cress, lettuce, turnip tops, beet tops and radish tops, yellow sweet potatoes, yellow corn, kidney, liver and sweet breads. It is destroyed by prolonged heating in the presence of air. McCollum states that it is especially needed by children because when inadequate they become susceptible to certain infectious diseases. Both night blindness and ophthalmia are due to prolonged deficiency of this vitamin.

Vitamin B. Beri-beri. This vitamin was discovered by Eijkman, a Dutch physician, in 1897. It is essential to normal nutrition and when deficient or absent, health steadily declines. Animals deprived of this vitamin lose their appetite and fail to grow. When absent from the diet for a considerable length of time beri-beri results in man and polyneuritis in fowls and the lower animals. Vitamin B. is claimed by investigators to be an important physiological stimulant to glandular metabolism. It is also said to be concerned in the metabolism of carbohydrates. It is readily soluble in water. It is stable to both heat and oxidation. Its chief source of supply are the tubers and root vegetables, the leafy vegetables, fruits, whole grains of rice, wheat, oats, corn, nuts, fish, and fish roe, brains, heart, kidney, liver, milk and its products.

Vitamin C. Scurvy. The absence of this vitamin from the diet produces scurvy. It also exercises an influence over calcium metabolism, since its absence from the diet results in various forms of hemorrhage. When present in the food of young animals it produces growth and well-being. Its presence in the food of animals of all ages is necessary to health and life. High temperature for a short period of time is less destructive to this vitamin than is a moderate degree of temperature for a long tme. Therefore, we must conclude that the pasteurization of milk is more injurious to the milk than to boil it for two or three minutes. The presence and quantity of vitamin C. in milk will depend upon the diet of the lactating animal. If the food she eats is rich in this vitamin, the milk will be correspondingly valuable in this respect.

The chief sources of supply are: Cloud berries, raspberries, lemon and orange juice, cabbage, tomatoes, carrots, beans, legumes, lettuce, onions, swedes, rutabaga and sprouted grains.

Vitamin D. Rickets. The scope of this paper does not permit of a discussion of rickets, although recognized to be increasingly prevalent and most protean in its manifestations. When vitamin D. is absent there occurs a failure in the metabolism of calcium and phosphorous, or where these salts are deficient in the food supply the child may be protected by Vitamin D. or the direct rays of the sun.

It must be remembered that breast fed ba-

bies are subject to rickets unless the mother is receiving an adequate amount of butter or yolk of egg, or is taking cod liver oil. Practically all infants fed upon certified milk, pastuerized milk, canned milk, or the commercial infant foods develop rickets unless given egg yolk, cod liver oil or are subjected to an abundance of sunlight.

Vitamin E. Reproduction. This vitamin was discovered as a result of the researches of Evans and Bishop of the University of California. "Certain diets have been found upon which young rats can grow to maturity in an apparently normal manner but upon which they never reproduce young. These animals are sleek and healthy looking; are sexually active but are sterile. A study of the females has shown that the ovarian function is normal as respects the interval which elapses between ovulations and fertility of the ova. These may become fertilized, implanted in the uterus and begin to develop into little rats. A week or so before the young are ready to be born, something happens which leads to their death unless the new substance, which is called vitamin E. is fed to the mother. "Employing their sterility diet, Evans and Bishop found it possible to supplement it with (1) butter fat sufficient to supply vitamin A. (2) Yeast rich in vitamin B. (3) Orange juice rich in vitamin C. (4) Cod liver oil rich in both A. and D. but without restoring the fertility. The substitution of a considerable part of the sterility diet by whole wheat, or wheat germ, or the addition of lettuce, lean meat or certain other foods, makes it possible for the female rats to complete their pregnancy and produce normal young. Thus the oil from the germ of wheat does not contain any of the hitherto recognized vitamins, yet it is said to be the most potent source of vitamin E."—McCollum.

In order to properly nourish the child necessary food must be furnished the pregnant mother to insure her own physical well-being and in addition produce a maximum amount of nourishment for the embryo. Her food must be especially rich in mineral matter, because the tooth buds for the first set of teeth are being formed by the eighth week of prenatal life in the human infant. By the fifteenth week the enamel organs appear and calcification begins about the twentieth week. The six year molars begin to calcify about the time the child is born. It is known that the amount of calcium which is deposited in the unborn child during the last three months is as great as in the preceding six months. It is also known that there is deposited in the infant's liver during the same period and stored for future use, five times as much iron as is stored in the liver of the adult. Consequently the anaemia that is invariably found in prematures and twins.

If the mineral elements are not supplied in her food, absorption from her own bones of these elements will take place and in turn her bones will become soft. It is a matter of common observation that the teeth of the pregnant woman deteriorate rapidly unless a diet is taken which is rich in mineral elements. Should these elements be supplied in sufficient amount dental decay will not take place. If properly selected food is taken by the pregnant woman it will, in the absence of disease, insure a strong and robust infant, and will contribute towards her safe passage through the ordeal of labor. This precaution will in a great measure contribute much towards the future supply of milk for the baby. We must not overlook the important fact that her milk reflects, in both quantity and quality, the food she eats.

It is the concensus of opinion that Mother's milk is the only rational food for her infant and that when another form of food is substituted the infant's health and life becomes imperilled.

When digestive disturbances occur in the nursing infant or the baby fails to gain in weight, we may be sure that either the mother's diet is wrong, the nursing intervals too short or the baby is being nursed from alternate breasts, rather than from both breasts at each feeding, or the baby is not permitted to be quiet. If certain simple rules are followed the mother should be able to nurse her baby from 10 to 12 months and there will be a constantly decreasing list of the diseases that are now recognized as of food deficiency origin as well as in those more obscure diseases of the glandular system that appear to bear such an intimate relationship to diet.

Before breast feeding has been discontinued it is well to teach the baby to take such simple foods as cow's milk, (either plain boiled, acidified with lactic acid or treated with bacillus bulgaricus or acidophilus), vegetable juices, fruit juices, and whole grain cereals. We must not overlook the important fact that even the very best quality of milk, as valuable as it is, cannot fulfil all the nutritional requirements after the first year and these largely vitamin and mineral and mineral must be supplied by fruit juices, leafy vegetable juices and whole grain cereals. From the second to about the fourth year, the diet must consist of milk, leafy vegetables and their juices, fruit juices, fresh fruit, white potato baked in the hull, meat juices, whole grain bread and whole grain cereals.

After the sixth year when the animal instincts manifest themselves by great physical activity and the mental processes are begun to be earnestly directed, more and not less attention, as is ordinarily the case, should be paid to the diet. More particularly should the physiological effects, as well as the chemical constituents, of the food be kept in mind. This is the period that foods that build up the muscle and nervous tissue should be emphasized. In addition to the foods already enumerated for the preceding period, such meats as beef steak, or rare roast beef, lamb and the meat of internal organs, such as calves' liver, sweet breads, brains, kidney and tongue, are especially valuable. The protective foods such as milk and the leafy vegetables (spinach, green cabbage, alfalfa, turnip tops, etc.) should be eaten in ample quantities.

The cereals are the most universally used of all food substances and because they are stable and may easily be transported great distances without deterioration, they are more responsible than any other form of foods for the prevention of famines, such as have from time to time, in the past afflicted the world. In order to be wholesome it is necessary to use the whole grain rather than a portion of them as is at present so popular. Each of the grains among the more important cereals is biologically complete, but each, on account of their amino acid, vitamin and mineral qualities, present such important differences that distinct advantage is gained by combining certain ones for their fullest nutritional value. All the advantages to be derived from the use of cereals may be had by the mixing of the whole grains of yellow corn, wheat, oats and rice. By so combining these cereals we get a stable food that is ample in fats, carbohydrates, the essential amino acids, vitamins and mineral salts. If the soil in which these cereals are grown is rich in minerals, their value will be correspondingly increased in their mineral content. Especially is this true as to calcium, potassium, phosphorous and nitrogen.

In conclusion, I wish to call to your attention certain deficient foods that are now in very general use. Among the more important of these is white flour, which has a relatively small percentage of the original value of wheat. The same is true of bolted corn meal. Feeding experiments made upon rats in such ready-to-serve cereals as may be represented by Grape Nuts and Corn Flakes are demonstrated to be unfit for human use. To a less extent this is also true of those cereal preparations from which the cortical portion of the grain has been removed and only a part of the germ reserved. This class is represented by Cream of Wheat, Farina, etc. Finally, may I remind you that the more serious of our problems as effected by education and is reflected in our economic condition, may in a large measure be solved by the proper feeding of the children of the State and to a less extent adults.

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THE ETIOLOGY AND SYMPTOMOLOGY OF HYPERTHYROIDISM*

By Robert Wilson, M. D., Charleston, S. C.

The term hyperthyroidism implies an increase in the thyroid secretion and is associated with certain adenomas of the thyroid gland, and with Grave's Disease, or exopthalmic goiter. These diseases, according tc Plummer are distinct from each other, the former representing a simple hyperfunction and the latter being more appropriately described by the term dysfunction. Crotti, on the other hand, regards them as fundamentally the same, differing only in degree. The activity of the thyroid is bound up with the iodin content of the gland which is greater than that of any other organ except the parathyroids. Following the suggestion of Kocher, that the thyroid probably contained iodin, Baumann in 1895 discovered in the gland a substance which he called iodothyrin containing 10 to 14 per cent of iodin, but the most important iodin-containing substance which has been isolated from the thyroid gland up to the present time is thyroxin separated by Kendall in 1914, which contains about 65% of iodin. This substance seems to exhibit most if not all of the thyroid gland activities and, therefore, may be regarded as its most important active principle. The effects are not due to the action of thyreoxin *per se* according to Kendall; thyreoxin rather acting as a catalyst, hastening the metabolic activities which cause the symptoms. Investigation of the iodin need of the gland and its behavior when the supply furnished by food and drink is insufficient gives ground for the belief that a deficiency of iodin leads to hyperplasia which can be prevented by the administration of iodin. This has been attempted on a more or less large scale in some localities where goiter is prevalent with good results, although success has not been invariable. But while the administration of iodin will often prevent thyroid

*Rend in the Symposium on Hyperthyroidism before the South Carolina Medical Association, Sumter, S. C., April 7, 1926.

hyperplasia, it is a fact of clinical observation that it will also not infrequently convert a simple goiter into a toxic goiter; and while it will in many instances lessen the toxemia of Grave's Disease, there are cases, on the other hand, which are not benefitted or which are made worse by its use. It would seem clear, therefore, that there are other factors besides iodin deficiency. McGarrison makes the interesting suggestion that possibly unhygienic surroundings or intestinal infection may be responsible for some cases in which the prophylactic use of iodin has not been satisfactory. Acting upon the observation of McClendon that bacteria may remove iodin from organic media, he was able by "scrupulous cleanliness" to prevent the development of goiter among fish confined in dirty water, an environment which rendered them liable to this disease. The condition of the gland itself may have an influence. Marine found that in dogs if five-sixths of the thyroid be removed iodin will prevent compensatory hypertrophy of the remaining one-sixth, but if more than this be removed no amount of iodin will prevent compensatory hyperthrophy of the remaining portion. McCarrison draws the conclusion that there are two types of hyperplasia, one due to disturbance at the threshold of absorption which is amenable to iodin administration, and one due to disturbance at the threshold of utilization which is not amenable to iodin administration. Statistics generally indicate that the disease occurs more frequently among women than among men, the figures from the Mayo clinic being 85% for women and 15% for men. The greatest number of cases makes their appearance between puberty and the menopause, although neither childhood nor the post-menopause period offers an immunity. A distinct hereditary predisposition may at times be traced, and the interesting observation is made occasionally of the incidence of myxaedema and exopthalmic goiter in different members of the same family, indicating the probable existence of a thyroid diathesis. Mental strain, prolonged anxiety, and worry, especially when associated with unusual physical exertion and loss of rest, are supposed to be determining influences in many cases, and sudden mental shock, particularly in the form of fright, has been assigned a causative role. If we are unwilling to accept these mental states as directly exciting factors, we may admit that an already existing hyperplasia may be rendered more active by such influences. Acute infections often precede the onset of thyroid hyperplasia, and have been suggested as possessing etiologic importance, and it is said that an acute infection of any location may convert a simple goiter into a toxic goiter. I have seen one case, on the contrary, in which an acute thyroiditis was followed by the complete subsidence of a simple goiter. Focal infection in tonsils or sinuses is regarded by many as important factors, and Kessel, Hyman and Lande concluded that they played an exciting role in 40% of cases studied by them. Syphilis and tuberculosis have been mentioned as occasionally responsible, but upon doubtful grounds. Pregnancy and lactation seem to play a variable role, sometimes initiative, sometimes lessening the symptoms of hyperthyroidism.

That iodin will produce a condition resembling the syndrome of hyperthyroidism was observed in 1895 by Rillict who used the term "constitutional iodism" to describe it. With the reintroduction of iodin in the treatment of hyperthyroidism such cases have multiplied in recent years. In the Jackson clinic, Madison, Wis., between January, 1923, and January, 1925, there were thirty-eight cases which were attributed to iodin of which twenty had been observed in the last six months of this period.

The mechanism by which the symptoms are produced has been the subject of much speculation. That "Grave's Disease is an intoxication of the body by a morbid activity of the thyroid gland" was the opinion expressed by Moebius in 1886, although suggested previously by Rehn. This conception is based upon the striking contrast presented clinically between myxedema and exophthalmic goiter, upon experimentation, upon the results of surgical treatment and upon pathological observations. Simple hyperfunction, however, does not explain all of the phenomena, and hence Janney has introduced the conception of thyroid "dysfunction." He assumes the existence of a toxic substance of thyroid origin to which some of the symptoms are due, such as tachy-

cardia, tremor, loss of weight and increased basal metabolism, while certain other symptoms are due to thyroid deficiency, in which group belong goiter, trophic nail change, brittleness and falling out of hair, and pigmentation of the skin.

Some authors have maintained that the primary factor is to be found in the nervous system. In support of this hypothesis emphasis is laid upon the effect of psychic shock, such as sudden fright, or other violent emotion involving anxiety, and upon the response of the thyroid gland to experimental stimulation of the sympathetic. There can be no doubt that the nervous system plays an important role, but it is probably secondary and not primary; although it may be assumed reasonably that nervous and mental instability constitute a fertile soil for the development of hyperthyroidism. Still another factor which must be taken into consideration is the interrelation between the thyroid and other glands of internal secretion making it probable that they contribute in varying degree to the production of the clinical syndrome. The disturbed metabolism of fats, for example, points to the hyphophysis, and the glycosuria and occasional true diabetes mellitus indicate involvement of the Islands of Langerhans. Out of the varied and contradictory speculation the clinical fact stands out clearly, that reduction of the substance of the gland by partial removal or by the action of the X-Ray is followed by partial or complete subsidence of the symptoms, hence we may infer that the primary and most important factor is the gland itself, although the nervous and endocrine systems doubtless contribute to the production of the clinical picture. Crotti sums it up by concluding that "although the thyroid gland plays the most important part in the production of Grave's Disease we must, nevertheless, conclude that other factors intervene at the same time, such as the nervous and polyglandular systems." Hence he reaches the conclusion that "Thyrotoxicosis is a *thyro-neuro-polyglandular* disease." But what the activating principle may be which sets in motion the thyroid machinery and constitutes the original cause of the complicated group of disordered functions, which clinically is hyperthyroidism, remains undetermined.

The symtomatology of hyperthyroidism cannot be discussed adequately in a brief paper. The symptoms cover a very extensive range of reactions on the part of the nervous system and the endocrine glands, and they do not appeal in a uniform sequence. The clinical picture, therefore, is variable and often misleading. I shall, therefore, content myself with merely a classified enumeration of some of the symptoms without attempting to discuss their relative importance, to undertake which would carry me far beyond the time allowed.

Thyroid
- Struma

Cardio-Vascular
- Tachycardia
- Palpitation
- Auricular Fibrillation
- Pulsations, aortic, hepatic, etc.
- Blood pressure variations

Eye-symptoms
- Exophthalmos
- Dallrymple, narrowing of the palpebral fissure
- Von Graefe, failing of lid to follow downward rotation of eye-ball
- Stellwag, infrequency of winking
- Moebius, or lack of convergence
- Lachrymentation
- Edema and pigmentation of the eyelids

Respiratory
- Shortness of breath
- Irritating cough
- Hoarseness
- Weakness of voice
- Profuse expectoration, occasionally

Digestive
- Increased flow of saliva
- Dryness of throat, occasionally
- Hyperacidity of subacidity
- Nausea
- Vomiting
- Diarrhea
- Imperfect digestion of fats
- Increased appetite, and later loss of appetite

Nervous
- Headache
- Insomnia
- Vertigo

Drawing pains, generalized or localized
Numbness

Muscular
Tremor
Muscular weakness and fatigability
Muscular cramps
Hypertonus, producing at times paresis

Mental
Irritability
Hasty speech
Rapid change of mood
Alteration in disposition
Hysteria

Metabolic
Emaciation
Glycosuria
Increased basal metabolism
Increased protein metabolism
Rise of temperature, occasional

Cutaneous
Abnormal sensation of heat
Increased sweating
Miliaria
Pigmentation
Falling out and brittleness of hair
Fissured nails
Dermographism
Pruritus

Osseous
Abnormal growth
Rheumatoid arthritis

Genital
Loss of libido and potentia
Menstrual disturbances

Blood
Leucopenia
Hyperlymphocytosis
Hypopolynucleosis
Hyperglycemia

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PUBLIC HEALTH

By R. G. BEACHLEY, M. D., Health Officer, Spartanburg County, Spartanburg, S. C.

THE PHYSICIAN OF THE FUTURE

Dr. Wendell C. Phillips, President of the American Medical Association, spoke of "the physician and the patient of the future" in his inaugural address at Dallas in April, 1926. That the family physician, the old time general practitioner, would again take his rightful place as the most important element in the profession, was Dr. Phillips' leading prediction. He also prophesied that the doctor would of necessity assume greater responsibilities in preventive medicine. His words on this topic deserve quotation:

"May I venture the following conclusions and opinions:

"The scheme of undergraduate medical education should be reconstructed to include in its curriculum as a prominent feature the science and art of health conservation, and the art of applying the principles of the science of medicine through the personal relationship of the physician and his patient. The undergraduate student must be trained to treat the body from the standpoint of health as well as that of disease.

"These added requirements to the educational program of the future physician emphasize the argument against any lowering of the standards of medical education or lessening of the time involved in the teaching process.

"Public health education is an outstanding need of the hour. The gospel of personal and community health is complex. It should be promulgated by health departments and agencies, by lectures, radio and film; but it will never reach its highest efficiency until it includes a maximum of direct personal instruction by properly qualified family physicians.

"The patient of the future, in view of his perfected health education, may be expected to derive from it a wise judgment which will lead him to seek the continued advice and counsel of his personal physician. Furthermore, in view of our perfected system of individual and community health education, cults and other menaces to public health, all of which are founded on theories for the most part baseless and futile, will gradually disappear before the rising sun of enlightened public opinion.

"The ideal family physician of the future by training, by experience, and by expert knowledge of health conservation will derive a potential power which will qualify him to control and direct the health problems of men.

"The family physician of the future must have proportionate representation on the councils of his profession. No specialty or combination of specialties, not even general surgery, should be permitted to dominate the health affairs of a community or of a nation.

"It is true that the service rendered by a physician may not be considered in terms of finance, but in no sense should our physician of the future offer this as an excuse for slothfulness in the management of his business affairs. Every detail of his newer service in the prevention of disease is of great value to his patient. Health education and conservation are services of value even greater to the patient than the sums paid for helping the body to repair the ravages of disease."

CASE REPORT

*COLORED FEMALE ROPER HOSPITAL

By T. E. Bowers, M. D.

Admitted March 22, 1926; Age 31; Died March 26, 1926.

Chief Complaint—Continuous bleeding from mouth and general weakness. Illness began about six weeks ago when patient fainted while at work in kitchen. Was followed by nausea and vomiting which kept up for three weeks during which time was scarcely able

*Presented before Medical Society, S. C., Charleston, April 27, 1926.

to retain any food at all. Vomitus was of foul odor and was, at times, blood tinged. A moderate temperature has been present since illness began. Patient went to bed with onset of illness and has been there since.

Three weeks after onset, the tongue began to swell and was very sore. There was a constant dribbling of saliva, a loosening of the teeth, and the development of small whitish elevations on the mucous membranes of the mouth. This condition became worse and about a week ago (history taken on the 25th) hemorrhages from the tongue and gums began and became so persistent and profuse that patient came to Hospital.

During the last three weeks, did not suffer from nausea and vomiting and could retain a soft diet. During this time, complained somewhat of headache and a medly of noises in her head comparable to "tin pans falling on each other." During this time there was also considerable dyspnoea.

Ever since onset of illness, six weeks ago, patient has been under care of a colored physician who attributed her trouble to "broken down nerves and a disturbance of the heart and kidneys." Patient took his medicine regularly and was cautioned against acids while taking it. (History obtained by R. W. Ball and Bruggerman from patient's mother). Past, venereal, and menstrual histories negative.

Physical Examination:—B. P. 103-80. Mouth—Ulceration around teeth and gums; blood oozing from both sides of tongue; breath foul; ulcers on sides of tongue. On admission, large blood clot was removed from mouth after which bleeding continued and suturing was resorted to. Chest negative. Cardio-vascular negative. Abdomen, G. U., skin, bones and joints, and neuro-muscular negative. The cervical glands were palpable. Later, a systolic murmur was noted over base of heart. All mucous membranes, and the conjunctivae were very pale.

Progress Notes:—When admitted, had a large blood clot in mouth. It was removed and mouth packed with adrenalin soaked gauze. Fibrinogen was given. On the 23rd, bleeding from tongue continued and suturing was resorted to. On 24th, condition poor, sleeping a great deal. On 25th, a transfusion was done and a marked reaction followed, and in which there was coma, stertorous breathing, with cold sweating extremities. Reaction lasted about one hour. During the night, lapsed into coma, labored respiration, profuse sweating, with cold clammy skin. Died at 3:45 P. M. on the 26th.

Laboratory Findings:—Urine (1) Cath.; yel; clear; acid; 1011; alb. III; sugar O; indican III; acetone O; casts, I c. gran., and I fine gran.; mucus I; epith. I; pus II; blood O. Blood counts (1) Hgb. 15 & 17; total reds 864,000; total whites, 20,600; achromia III; anisocytosis II; poik. I; gran. degen. I; S. L. 6; L. L. I; L. M. 2; Trans. I; polynuclears 90; losins 0; basop. 0.

Gross Anatomical Diagnoses

Histological Diagnoses

General body anemia

General Tissue anemia

Lungs:—Anthracosis

Lungs:—Anthracosis

Heart:—Extreme fatty and parench.

Heart:—Extreme parench. degeneration degeneration.

Spleen:—Chronic splenitis

Spleen:—Chronic splenitis

Liver:—Fatty and parnech. degeneration.

Liver:—Fatty and parnech. degeneration.

Kidneys:—Primary (?) chronic interstitial nephritis, fatty degeneration.

Kidneys:—Chronic extreme diffuse interstitial, glomerular, tubular nephritis, arteriosclerotic nephritis, extreme clyd. swelling.

Acute ulcerative mercurial (?) glossitis and gingivitis.

Congestion of gastric and duodenal mucosae.

SURGERY

SAMUEL ORR BLACK, M. D., Spartanburg, S. C.

THE ICTERUS INDEX

Berniheim. Surgery Clinic of N. A. February, 1925

The Icterus Index is a measure of jaundice, and the test is a determination of the amount of bilirubin in the blood.

The hemoglobin is the mother substance of bilirubin. The coloring matter of the red blood cell is liberated and converted into bile pigment. Bilirubin is a normal constituent of the blood. In the fasting state it gives the blood serum its yellow color.

Since 1921 determinations of bilirubinemia have been made with fairly accurate findings. There may be a hyper-bilirubinemia or a hypo-bilirubinemia. The former occurs in biliary disturbances, e. g. cholecystitis, hepatitis, cholangitis, obstructions of whatever origins, pernicious anemia, malaria and other hemolytic and infectious disorders.

The normal range of the bilirubin content of the blood is from four to six. Clinical jaundice is only present when the index is fifteen or more.

There is a latent jaundice zone, ranging between six and fifteen, e.g., there is an increase in the amount of blood bilirubin, but this increase is not sufficient to be recognized clinically, i. e. the sclerae and skin are not tinged.

In these cases therefore of latent jaundice, the test is of value, as it is in cases of clinical jaundice. In the latter there may be a question as to whether the jaundice is obstructive or catarrhal. Jaundice disappears from the blood quicker than it does from the tissues. Repeated icterus index tests may show a lessening of the blood pigment far sooner than it would be detected by the naked eye.

In ruptured ectopic pregnancy with blood clot formation in the pelvis there may be sufficient absorption to raise the icterus index, and thus it may become a differentiating point.

Hypo-bilirubinemia is found in cases of marked secondary anemia. In such a case there is a marked reduction of red blood cells in the stream, hence a lessening in the number destroyed and this means a reduction in the blood bilirubin and this induces a low color index.

In pernicious anemia the index is high. In secondary anemia it is low, hence it serves to differentiate these two conditions.

The liver function test as devised by Rosenthal is based on the fact that the liver excretes the dye phenaltetrachlorphthalein when injected into the blood.

A normal liver removes all of the dye from the blood in one hour. A diseased liver fails to remove it in that time.

In the normal individual all the dye but five per cent has been removed from the blood in fifteen minutes.

In cirrhosis, lues and certain poisons there may be a high blood retention due to non functioning hepatic tissues. In metastatic liver malignancy where only a nodule or two is present, there may be little if any retention, but if the liver be extensively involved with the malignant process the dye retention will be high. Owing to the enormous size of the liver, there is a big margin of safety as there is sufficient uninvolved tissue to carry on hepatic function.

EYE, EAR, NOSE AND THROAT

J. F. TOWNSEND, M. D., F. A. C. S., CHARLESTON, S. C.

THE IMPORTANCE OF OPHTHALMIC ASPECTS OF GENERAL MEDICINE

By Edward Jackson, M. D., Sc. D., F. A. C. S,. Denver, Colorado

Read at the Thirteenth Annual Meeting of the Pacific Coast Oto-Ophthalmological Society, at Vancouver, B. C.

"All vascular diseases, known post-mortem or by their gross effects, while still unrecognized in other organs, are studied in the eye from incipiency to complete resolution, or functional or organic destruction of the parts involved.

"The reaction of the nervous system to all sorts of injurious influences, from eye strain to poisons introduced from without or developed within the body, is forced upon our attention by the gross appearances of retina and optic nerve, by the altered reactions of the pupil or the extremely delicate tests of altered visual acuity and color perception. The ophthalmic evidence regarding effects of wood alcohol, tobacco, quinine and a hundred other agents, to say nothing of gastro-intestinal intoxication,, or the toxins of acute and chronic infections, will illustrate the field which the eye affords to study the action of nerve poisons.

The relations of the eye to the central nervous system are such that the eye might be termed the "bulletin board for diseases of the brain and spinal cord." On this he enlarges, perhaps, too extensively.

Then the eye has its full share of metastatic conditions. Not more numerous perhaps than in some other parts of the body, but more certain to be noticed there, and when noticed, more open to intelligent study, more informing as to the nature of the process thus transferred, than metastatic lesions in any other part of the organism.

Foci of infection or gastrointestinal disease may remain unsuspected until they affect the uveal tract or vitreous. Various parasitic diseases like the guinea worm and onchocerciasis are not thought of or were not known or understood until their ocular manifestations began to attract attention.

One observer, posted favorably on a mountain top, gives fire protection to thousands of square miles of forest. The ophthalmic physician from his point of vantage, watching the eye and interpreting the signals it gives, as the forest observer would interpret a distant column of smoke, has command of a great territory of disease. One might say that the eye is only one small part of the body and other organs show the effects of disease. True. So is the mountain observer only one man with one pair of eyes, and other men can see. But the observer happens to be placed where his vision has the widest possible range. Similarly the ophthalmic physician happens to be familiar with the manifestations of disease in an organ where all the principal systems of the body are represented and where such manifestation can be most quickly and exactly appreciated, where they can be most thoroughly studied, in regard to which our knowledge is most developed and systematic. Epidemic encephalitis is a general infection with its characteristic lesions situated in the brain. But in many cases and in many communities its presence has been recognized by the ophthalmologist before it was suspected by the neurologist or the general physician.

The man in the valley can see the smoke and know that it comes from a fire somewhere. The man on the mountain can better see where it comes from, what territory the fire occupies and where the fire fighters must be moved to oppose it. Being placed there it becomes his duty to keep alert, on the lookout, and to give the earliest, most definite information possible to those who command in the actual conflict with the forces of destruction.

It is time that those who study the diseases of the eye should understand their position of advantage and accept the responsibility it en-

tails in the general struggle of the medical profession with the forces of disease, disintegration and death.

He then discusses the qualifications necessary for one to interpret these symptoms and goes on to say, "He who would qualify for the function of an ophthalmic physician, or a consultant in the best sense, must have both the broad outlook on disease in general and the sense of proportion obtained by thinking on its general problems, and an exact practical acquaintance with modern methods of ophthalmic examination and familiarity with forms of ocular anomaly and disease. In short, he must be the well-trained, experienced, thorough, conscientious ophthalmologist who through his years of ophthalmic practice has still kept in touch with the problems and yearly advances of general medicine. He must be the experienced, developed, ophthalmic physician.

He should be able to test visual acuity in different ways and under all sorts of circumstances. He must know that vision of 20-20 may be vision markedly below the normal for a particular person; that visual acuity above standard and entirely normal for the individual patient is possible along with marked papilledema, or great narrowing of the visual field, hemianopsia, or scotomata, of various forms and locations and significance. He must have in mind the possible causes of sudden variations in visual acuity, circulatory disturbances with brain tumor, or pituitary disease, toxic amblyopia, spasm or paresis of accommodation. The effect of floaters in the vitreous, the ups and downs of glaucoma, or the changes in visual acuity with changes in the crystalline lens. He should know the meaning of each change in the form of the field of vision."

The ophthalmoscope has placed upon us the burden of correlating the visible changes in appearance of the nerve head with the nature of the pathogenic agent, the progress of the disease process, the possibilities for recovery, the influence of therapeutic agents in checking disease and in bringing about recovery. Swiftly accumulating observations of many workers in ophthalmoscopy show the very wide range of conditions, ocular and extraocular, in which this method of examination is giving new light on the character and presence of general disease.

With references to the circulation of the blood, it might be said in all soberness and restraint of enthusiasm that the use of the ophthalmoscope has doubled the clinical value of Harvey's great discovery. The widening of veins by collapse or by distension, the irregular caliber of the blood stream due to spasm or to endarteritis, the change of color or hiding of veins crossing behind them, due to changes in the arterial walls, should be familiar ophthalmic aspects of general disease. The exudates an hemorrhages of various forms have a wide range of significance in connection with circulatory conditions. That significance can only be discovered by the skilled ophthalmoscopist. There are refinements of observation and judgment that can only be expected of the experienced ophthalmic physician.

The recognition of early departures from health in the small retinal vessels is more definite, or significant than any observations on the blood pressure. The warning it should convey would be of the highest value to a large proportion of people who have reached middle age. If such information were at the disposal of every patient for whom a physician prescribed correcting lenses, how many intelligent well-to-do people would go to the non-medical optometrist or relief from presbyopia?"

There are other methods of examination that promise results of great interest in general medicine. The study of epithelial parasitism in the eye opens up a field of great promise in bacteriology and pathology, and for this, as for other things, the eye is the peculiarly favorable portion of the body for clinical experiment and observation."

We try to obtain this condition work at the Roper Hospital between the branches of medicine, for instance, all cardio-renal cases and skull injuries have an examination of the ocular fundi by the ophthalmological department.

MINUTES

MINUTES
HOUSE OF DELEGATES
Tuesday, April 6, 1926, 8 P. M.

The House of Delegates met in the auditorium of the Girls' High School, Sumter, S. C., and was called to order by the President, Dr. Robert S. Cathcart, Charleston.

Dr. J. H. Cannon, Charleston, Chairman of the Committee on Credentials, reported a quorum present, and asked permission to defer making a full report until later in the session. Such permission was granted, and the partial report accepted.

The President read his annual address to the House of Delegates, and the Secretary's report was then read by Dr. E. A. Hines, Secretary-Treasurer. Dr. Hines recommended that a committee of five be appointed and be instructed to study the model constitution and by-laws and the constitution and by-laws of the South Carolina Medical Association, reporting next year with recommendations for revision.

The report of the Board of Councilors was read by Dr. S. E. Harmon, Chairman, who also gave a short verbal report of the meeting of the Council on Tuesday afternoon; and the councilors then reported for their districts as follows:

Second District	Dr. S. E. Harmon
Third District	Dr. T. L. W. Bailey
Fourth District	Dr. J. R. Young
Fifth District	Dr. J. R. DesPortes
Seventh District	Dr. T. R. Littlejohn

The Secretary-Treasurer announced that Dr. A. E. Baker, Sr., Councilor for the First District, was unavoidably detained at home, but would send a report. He then read the report for the Eighth District, and the resignation of Dr. C. I. Green, the councilor for that district.

The reports of the chairman of the council and of the councilors were accepted as information and ordered spread on the minutes, and the resignation of Dr. Green was accepted with regret.

Dr. W. P. Timmerman, Batesburg, moved that a committee of five be appointed to consider the recommendations made by the officers and the council, with the exception of the recommendation of the president concerning the appointment of an assistant to the secretary (this coming under the jurisdiction of the council). Motion seconded and carried.

The President called for the full report of the Committee on Credentials, and Dr. Cannon, Chairman, read the names of the delegates whose credentials had been presented to the committee. On motion of Dr. Charles W. Kollock, the report was received as information and those whose names were read were seated as delegates.

The report of the Committee on Scientific Work was read by the Chairman, Dr. Cannon, and was accepted.

Dr. M. H. Wyman, Chairman, read the report of the Committee on Public Policy and Legislation, which was received as information and ordered spread on the minutes.

The report of the Executive Committee of the State Board of Health was read by Dr. Robert Wilson, Chairman of the State Board of Health, and was discussed by Drs. M. H. Wyman and Clarence E. Owens. Dr. Owens moved that it be published in the journal of the association and in the press. Motion carried.

The report of the Committee on Health and Public Instruction was read by Dr. E. E. Epting, a member of the committee. After discussion by Dr. M. H. Wyman, Dr. S. E. Harmon, and Dr. Black, the report was received as information and spread on the minutes.

Dr. A. Earle Boozer, Secretary, read the report of the State Board of Medical Examiners, which was received.

Dr. Hines, Delegate to the American Medical Association, made a short verbal report, which was received as information.

The report of the Committee on the Prevention of Venereal Diseases was read by Dr. James J. Ravenel, Chairman, and was adopted.

The report of the Committee on the Efficiency and Standardization of Hospitals was read by Dr. George H. Bunch, Chairman.

The President next called for the report of the Committee on Military Affairs. The chairman, Dr. Curran B. Earle, was not present, and Dr. Charles W. Kollock, a member of the committee, stated that no meeting had been called.

New Business

Dr. T. G. Simons of the Charleston delegation, read some correspondence in regard to "Hygeia," and then read some resolutions and moved their adoption. Motion seconded and carried.

Dr. D. B. Frontis, Ridge Springs, asked for information as to how several small county societies could coalesce for the purpose of getting a larger membership and doing better work, and moved that the question be referred to the council and that the council report at the next meeting on the advisability of such union or cooperation. After discussion by Dr. Simons and Dr. Wilson, the motion was adopted.

Dr. Frank Lander, Williamston, presented the invitation of the Anderson County Medical So-

ciety for the Association to meet in Anderson in 1927, and also invitations from the city officials, the Chamber of Commerce, and the various civic clubs. On motion of Dr. Wyman, the invitation to meet in Anderson was accepted.

Dr. Jennings, on behalf of the Lee County Society, read a resolution in regard to division of fees between general practitioners and specialists, and moved its adoption. The motion was seconded, and the matter was then discussed by Drs. Charles W. Kollock, Frank Lander, Edward F. Parker, H. M. Shaw, W. A. Tripp, Warnock and Hartzog. Dr. Hartzog moved to table the motion for adoption of the resolution, which motion was seconded and carried. Dr. Jennings then asked for a roll call vote on the motion to table, which resulted as follows: Aye, 59; no, 3; not voting, 2.

The Secretary read some correspondence from the legal department of the American Medical Association in regard to the importance of the proper labeling of lye and lye products, and a letter from Dr. W. C. Woodward, of the American Medical Association, in regard to the increase in the number of persons being treated at the expense of the Government. After discussing the latter question, Dr. S. O. Black moved that the action taken thereupon by the House of Delegates of the American Medical Association be approved. Motion seconded and carried.

The report of the Committee on Necrology was read by Dr. W. P. Timmerman, the audience standing. The report was received as information and ordered spread on the minutes.

Election of Officers

The following nominations for president were made:

Dr. William A. Boyd, Columbia, by Dr. Edward F. Parker, Charleston. Seconded by Dr. J. W. Jervey, Greenville, and Dr. William Weston, Columbia.

Dr. George H. Bunch, Columbia, by Dr. L. O. Mauldin, Greenville. Seconded by Dr. C. F. Williams, Columbia; Dr. C. E. Owens, Columbia.

Dr. H. R. Black, Spartanburg, by Dr. J. R. Young of Anderson. Seconded by Dr. Frank Lander, Williamston, and Dr. Jennings.

On the third ballot Dr. Bunch was elected.

The other officers were elected as follows:

First Vice-President—Dr. W. C. Black, Greenville.

Second Vice-President—Dr. C. J. Lemmon, Sumter.

Third Vice-President—Dr. W. L. Pressly, Due West.

Secretary-Treasurer—Dr. E. A. Hines, Seneca.
Councilor Second District—Dr. S. E. Harmon, Columbia.

Councilor Fourth District—Dr. D. L. Smith, Spartanburg.

Councilor Sixth District—Dr. C. R. May, Bennettsville.

Councilor Eighth District—Dr. John L. Folk, Fairfax.

Members of the State Board of Medical Examiners:

Second Congressional District—Dr. J. S. Matthews.

Fourth Congressional District—Dr. Baxter Haynes, Spartanburg.

Member of the State Board of Health from the Second Congressional District—Dr. L. D. Boone, Langley.

Delegate to the American Medical Association—Dr. J. H. Cannon, Charleston. Alternate—Dr. G. A. Neuffer, Abbeville.

The House of Delegates then adjourned sine die.

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IN MEMORIAM

On May 6, 1926, Isaac A. Bigger, M. D., of Rock Hill, S. C., departed this life. For thirty-nine years he had been a practicing physician within the limits of York county. For the first twenty years of this time his work lay in the Point section of York county and the last portion of his time was spent in Rock Hill, S. C.

His life was busy to the limit of his capacity. During his life near Bethel in the Point section, there were practically no roads and the physical labor involved in his work was terrific, get home uncomplainly. He was in all respects a good citizen. To all about him without reference to color or condition, he was kind and courteous. He had always a large consultation work. As a physician he was careful, conscientious and thorough in his work but the most noticeable thing about his medical work was his rare diagnostic acumen.

We mourn his loss and know in our hearts that "a prince and great man has fallen" from the rank.

"Yet perhaps it still is better
That his busy life is done
He has seen old views and patients
Disappearing one by one.
He has learned that death is Master
Both of science and of art
Though he did his duty grandly
Though he acted out his part
He's entitled to a furlough
For his mind and for his heart."

W. W. Fennell,
E. W. Pressly,
W. C. Whitesides,
Committee on Necrology.

IN MEMORIAM

On March 26, 1926, Dr. W. M. Love of Chester, S. C., died at the Charlotte Sanatorium. Though for a number of years prior to his death he had practiced his profession in Chester, S. C., and was no longer a member of our county association, yet the long years that he lived and labored among us, the promptitude with which he attended our association meetings, and the pride which we as a association feel in his record while here prompts us to make this short tribute to his memory. As a country physician he lived up to the memories and traditions that cluster about the name of family physician.

Like Goldsmith's Village Preacher:

"For in his duty prompt to every call
He watched, and wept, he hoped and worked for all."

We shall miss his hearty hand clasp and his genial smile.

Good friend, ave et vale.

W. W. Fennell,
E. W. Pressly,
W. C. Whitesides,
Committee on Necrology.